Amendments to the Specification

Please add the following paragraph immediately following paragraph [0001] which appears in the specification on page 1:

This application is a U.S. National Stage Application under 35 U.S.C. § 371 of PCT/US2005/003715 which was filed on 4 February 2005 and claims the benefit of U.S. Provisional Patent Application serial number 60/542,391 which was filed on 6 February 2004, the entirety of which applications are incorporated herein by reference.

Please delete paragraphs [0037] – [0051] which appear in the specification on pages 8 – 12 and substitute the following paragraphs [0037] – [0051] in place thereof:

[0037] The siRNA design for WSSV gene VP28 (AF369029) can be done several different ways. As designed by Ambion, one siRNA Design is based on a sense siRNA strand (5'→3') GGUUGGAUCA GGCUACUUCT T (SEQ ID NO: NO: 1) and an antisense siRNA strand (5'→3') GAAGUAGCCU GAUCCAACCT C (SEQ ID NO: NO: 2). The template design for this to use pSilencer(TM) siRNA expression vectors (2.0, 2.1, 3.0, & 3.1 from Ambion) is the top Strand Oligonucleotide Template 5'-GATCCGGTTG GATCAGGCTA CTTCTTCAAG AGAGAAGTAG CCTGATCCAA CCTCTTTTTT GGAAA-3' (SEQ ID NO: NO: 3). With the bottom Strand Oligonucleotide Template: 5'-AGCTTTTCCA AAAAAGAGGT TGGATCAGGC TACTTCTCTC TTGAAGAAGT AGCCTGATCC AACC G-3' (SEQ ID NO: NO: 4).

[0038] A second VP28 siRNA design has a sense siRNA strand (5'→3') GGCUACUUCA AGAUGACUGT T (SEQ ID NO: NO: 5) with an antisense siRNA strand (5'→3') CAGUCAUCUU GAAGUAGCCT G (SEQ ID NO: NO: 6). For the pSilencer vectors the top strand oligonucleotide template is 5'-GATCCGGCTA CTTCAAGATG ACTGTTCAAG AGACAGTCA TCTTGAAGTA GCCTGTTTTT TGGAAA-3' (SEQ ID NO: NO: 7) while the bottom strand oligonucleotide template is 5'AGCTTTTCCA AAAAACAGGC TACTTCAAGA TGACTGTCT CTTGAACAGT CATCTTGAAG TAGCC G-3' (SEQ ID NO: NO: 8).

[0039]   A third possible VP28 siRNA Design has a sense siRNA strand (5'→3')
GGUGUGGAAC AACACAUCAT T (SEQ ID ~~NO:~~ NO: 9) and an antisense siRNA strand
(5'→3') UGAUGUGUUG UUCCACACCT T (SEQ ID ~~NO:~~ NO: 10). This requires a
template design for pSilencer(TM) siRNA expression vectors having a top strand oligonucleotide
template 5'-GATCCGGTGT GGAACAACAC ATCATTCAAG AGA TGATGT
GTTGTTCCAC ACCTTTTTTG GAAA-3' (SEQ ID ~~NO:~~ NO: 11) with a bottom strand
oligonucleotide template 5'-AGCTTTTCCA AAAAAGGTGT GGAACAACAC
ATCATCTCTT GAA TGATGT GTTGTTCCAC ACC G-3' (SEQ ID ~~NO:~~ NO: 12).

[0040]   The siRNA design for WSSV gene VP26 (AF369029) can be done several different
ways. As designed by Ambion one siRNA design is based on a sense siRNA strand (5'→3')
GGGCAAAGGU AAUGUCAAUT T (SEQ ID ~~NO:~~ NO: 13) with an antisense siRNA
Strand (5'→3') AUUGACAUUA CCUUUGCCCT T (SEQ ID ~~NO:~~ NO: 14). The template
design for pSilencer(TM) siRNA expression vectors (2.0, 2.1, 3.0, & 3.1) has a top strand
oligonucleotide template (5'→3') 5'-GATCCGGGCA AAGGTAATGT CAAT TTCAA
GAGAATTGAC ATTACCTTTG CCCTTTTTTG GAAA-3' (SEQ ID ~~NO:~~ NO: 15) with a
bottom strand oligonucleotide template (5'→3') 5'-AGCTTTTCCA AAAAA GGGC
AAAGGTAATG TCAATTCTCT TGAAATTGAC ATTACCTTTG CCC G-3' (SEQ ID
~~NO:~~ NO: 16).

[0041]   A second possible siRNA design for VP26 has a sense siRNA strand (5'→3')
GGUCCUACAA UACUCCUCUT T (SEQ ID ~~NO:~~ NO: 17) with an antisense siRNA strand
(5'→3') AGAGGAGUA UUGUAGGACC TC (SEQ ID ~~NO:~~ NO: 18). This has a template
design for pSilencer(TM) siRNA expression vectors (2.0, 2.1, 3.0, & 3.1) with a top strand
oligonucleotide template 5'-GATCCGGTCC TACAATACTC CTCTTTCAAG AGA AGAGGA
GTATTGTAGG ACCTCTTTTT TGGAAA-3' (SEQ ID ~~NO:~~ NO: 19) and a bottom strand
oligonucleotide template 5'-AGCTTTTCCA AAAAGAGGT CCTACAATAC TCCTCTTCTC
TTGAAAGAGG AGTATTGTAG GACC G-3' (SEQ ID ~~NO:~~ NO: 20).

[0042]   A third possible siRNA design for VP26 has a sense siRNA strand (5'→3')
GGAAACAUUA AGGGAAAUAT T (SEQ ID ~~NO:~~ NO: 21) with an antisense siRNA
Strand (5'→3') UAUUUCCCUU AAUGUUUCCT G (SEQ ID ~~NO:~~ NO: 22). The template
design for pSilencer(TM) siRNA vectors has a top strand oligonucleotide template 5'-

GATCCGAAAC ATTAAGGGAA ATATTCAAGA GATATTTCCC TTAATGTTTC CTG TTTTTT GGAAA-3' (SEQ ID ~~NO:~~ —NO: 23) with a bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAA GAAA CATTAAGGGA AATATCTCTT GAATATTTCC CTTAATGTTT CC G-3' (SEQ ID ~~NO:~~ —NO: 24).

[0043]   Another WSSV gene *ProIn* (AF369029) has a siRNA design with a sense siRNA strand (5'→3') GGGAAGAAUU CUACAAGAAT T (SEQ ID ~~NO:~~ —NO: 25) and an antisense siRNA strand (5'→3') UUCUUGUAGA AUUCUUCCCT G (SEQ ID ~~NO:~~ —NO: 26). The template design for pSilencer(TM) siRNA vectors has a top strand oligonucleotide template (5'→3') 5'-GATCCGGGAA GAATTCTACA AGAATTCAAG AGATTCTTGT AGAATTCTTCC CTGTTTTTTG GAAA-3' (SEQ ID ~~NO:~~ —NO: 27) with a bottom strand oligonucleotide template (5'→3') 5'-AGCTTTTCCA AAAAACAGGG AAGAATTCTA CAAGAATCTC TTGAATTCTT GTAGAATTCT CCC G-3' (SEQ ID ~~NO:~~ —NO: 28).

[0044]   A second siRNA Design for *ProIn* has a sense siRNA strand (5'→3') GGGACCCUUU CAUGAAACAT T (SEQ ID ~~NO:~~ —NO: 29) and an antisense siRNA strand (5'→3') UGUUUCAUGA AAGGGUCCCT T (SEQ ID ~~NO:~~ —NO: 30). The template design for pSilencer(TM) siRNA vectors has a top strand oligonucleotide template 5'-GATCCGGGAC CCTTTCATGA AACATTCAAG AGATGTTTCA TGAAAGGGTC CC TTTTTTG GAAA-3' (SEQ ID ~~NO:~~ —NO: 31) with a bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAA GGGAC CCTTTCATGA AACATCTCTT GAATGTTTC ATGAAAGGGT CCC G-3' (SEQ ID ~~NO:~~ —NO: 32).

[0045]   A third siRNA Design for *ProIn* has a sense siRNA strand (5'→3') GGCAUACAGA UGCCCUUUAT T (SEQ ID ~~NO:~~ —NO: 33) and an antisense siRNA strand (5'→3') UAAAGGGCAU CUGUAUGCCT T (SEQ ID ~~NO:~~ NO: 34). The template for pSilencer(TM) siRNA vectors has a top strand oligonucleotide template (5'→3') 5'-GATCC GGCAT ACAGATGCCC TTATTCAAG AGATAAAGGG CATCTGTATG CCTTTTTTGG AAA-3' (SEQ ID ~~NO:~~ —NO: 35) and bottom strand oligonucleotide template (5'→3') 5'-AGCTTTTCC AAAAAA GGCA TACAGATGCC CTTTATCTCT TGAATAAAGG GCATCTGTAT GCC G-3' (SEQ ID ~~NO:~~ —NO: 36).

[0046]   Another potential gene for RNA interference is the white spot virus Rr092 gene (AF369029). A possible siRNA design for *Rr092* has a sense siRNA strand (5'→3')

GGAAGAUUCA UCUGUUCGAT T (SEQ ID ~~NO:~~ NO: 37) and an antisense siRNA strand

(5'→3') UCGAACAGAU GAAUCUUCCT G (SEQ ID ~~NO:~~ NO: 38). The template design

for pSilencer(TM) siRNA vectors has a top strand oligonucleotide template (5'→3') 5'-GATCC

GAAGA TTCATCTGTT CGATTCAAGA GATCGAACAG ATGAATCTTC CTG TTTTTGG

AAA-3' (SEQ ID ~~NO:~~ NO: 39) and bottom strand oligonucleotide template

5'-AGCTTTTCCA AAAAA CAGG AAGATTCATC TGTTCGATCT CTTGAATCGA

ACAGATGAAT CTTCC G-3' (SEQ ID ~~NO:~~ NO: 40).

[0047]   A second potential siRNA Design for Rr092 has a sense siRNA strand (5'→3')

GGACAUGAUU AUGCGUGUGT T (SEQ ID ~~NO:~~ NO: 41) and an antisense siRNA strand

(5'→3') CACACGCAUA AUCAUGUCCT G (SEQ ID ~~NO:~~ NO: 42). The template design

for pSilencer(TM) siRNA vectors has a top strand oligonucleotide template 5'-GATCCGGACA

TGATTATGCG TGTGTTCAAG AGACACACGC ATAATCATGT CCTGTTTTTT GGAAA-

3' (SEQ ID ~~NO:~~ NO: 43) and a bottom strand oligonucleotide template 5'-AGCTTTTCCA

AAAAACAGGA CATGATTATG CGTGTGTCTC TTGAACACAC GCATAATCAT GTCC

G-3' (SEQ ID ~~NO:~~ NO: 44).

[0048]   A third potential siRNA design for *Rr092* has a sense siRNA strand (5'→3')

GGAUACCAUC AAUAGAAAGT T (SEQ ID ~~NO:~~ NO: 45) and an antisense siRNA strand

(5'→3') CUUUCUAUUG AUGGUAUCCT T (SEQ ID ~~NO:~~ NO: 46). Template design for

pSilencer(TM) siRNA vectors with a top strand oligonucleotide template 5'-GATCCGGATA

CCATCAATAG AAAGTTCAAG AGACTTTCTA TTGATGGTAT CCTTTTTTGG AAA-3'

(SEQ ID ~~NO:~~ NO: 47) and a bottom strand oligonucleotide template 5'-AGCTTTTCCA

AAAAAGGATA CCATCAATAG AAAG TCTCT TGAACTTTCT ATTGATGGTA TCC G-3'

(SEQ ID ~~NO:~~ NO: 48).

[0049]   Another WSSV gene that could be regulated by RNAi is the DNAPol (AF369029)

gene. A potential siRNA design for *DNAPol* has a sense siRNA strand (5'→3')

GGAAGUGGUC AUCUACGACT T (SEQ ID ~~NO:~~ NO: 49) with an antisense siRNA strand

(5'→3') GUCGUAGAUG ACCACUUCCT T (SEQ ID ~~NO:~~ NO: 50). Template design for

pSilencer(TM) siRNA vectors has a top strand oligonucleotide template (5'→3') 5'-

GATCCGGAAG TGGTCATCTA CGACTTCAAG AGAGTCGTAG ATGACCACTT

CCTTTTTTGG AAA-3' (SEQ ID ~~NO:~~ NO: 51) and a bottom strand oligonucleotide

template (5'→3') 5'-AGCTTTTCCA AAAAAGGAAG TGGTCATCTA CGACTCTCTT GAAGTCGTAG ATGACCACTT CC G-3' (SEQ ID NO̶:̶ ̶̶̶NO: 52).

[0050] A second siRNA Design for *DNAPol* has a sense siRNA Strand (5'→3') GGAAGAACAU GAAACUGUCT T (SEQ ID NO̶:̶ ̶̶̶NO: 53) and an antisense siRNA strand (5'→3') GACAGUUUCA UGUUCUUCCT T (SEQ ID NO̶:̶ ̶̶̶NO: 54). Template design for pSilencer(TM) siRNA vectors has a top strand oligonucleotide template 5'-GATCCGGAAG AACATGAAAC TGTC TTCAA GAGAGACAGT TTCATGTTCT TCCTTTTTTG GAAA-3' (SEQ ID NO̶:̶ ̶̶̶NO: 55) and a bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAAGGAAG AACATGAAAC TGTCTCTCTT GAAGACAGTT TCATGTTCTT CC G-3' (SEQ ID NO̶:̶ ̶̶̶NO: 56).

[0051] A third design for siRNA for *DNAPol* has a sense siRNA strand (5'→3') GGAGCAUUGU CAUUUAAUAT T (SEQ ID NO̶:̶ ̶̶̶NO: 57) with an antisense siRNA strand (5'→3') UAUUAAAUGA CAAUGCUCCT C (SEQ ID NO̶:̶ ̶̶̶NO: 58). Template design for pSilencer(TM) siRNA vectors has a top strand oligonucleotide template 5'-GATCCGGAGC ATTGTCATTT AATA TTCAAG AGATATTAAA TGACAATGCT CCTCTTTTT GGAAA-3' (SEQ ID NO̶:̶ ̶̶̶NO: 59) and a bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAA GAGGA GCATTGTCAT TTAATATCTC TTGAATATTA AATGACAATG CTCC G-3' (SEQ ID NO̶:̶ ̶̶̶NO: 60).

Please delete paragraphs [0122] – [0127] which appear in the specification on pages 23 – 25 and substitute the following paragraphs [0122] – [0127] in place thereof:

[0122] RNAi designs for Taura syndrome virus (TSV) *RdR*p gene (AF277675) that could be regulated by RNAi can be done several different ways. As designed by Ambion one siRNA design is based on a sense siRNA strand (5'→3') GGAGUGUCUA AUGCGGAGAT T (SEQ ID NO̶:̶ ̶̶̶NO: 61) and an antisense siRNA strand (5'→3') UCUCCGCAUU AGACACUCCT G (SEQ ID NO̶:̶ ̶̶̶NO: 62). The template design for this to use pSilencer(TM) siRNA vectors has the top strand oligonucleotide template 5'-GATCC GGAGT GTCTAATGCG GAGATTCAAG AGATCTCCGC ATTAGACACT CCTGTTTTTT GGAAA-3' (SEQ ID NO̶:̶ ̶̶̶NO: 63) with the bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAA CAGGA

GTGTCTAATG CGGAGATCTC TTGAATCTCC GCATTAGACA CTCC G-3' (SEQ ID NO: ~~NO:~~ NO: 64).

[0123] Another RNAi design for Taura syndrome virus (TSV) *RdRp* gene (AF277675) that could be regulated by RNAi can be done several different ways. As designed by Ambion one siRNA design is based on a sense siRNA strand (5'→3') GGGAAGAGCG GAAAGCAGAT T (SEQ ID ~~NO:~~ NO: 65) and an antisense siRNA strand (5'→3') UCUGCUUUCC GCUCUUCCCT T (SEQ ID ~~NO:~~ NO: 66). The template design for this to use pSilencer(TM) siRNA vectors has the top strand oligonucleotide template 5'-GATCC GGGAA GAGCGGAAAG CAGATTCAAG AGATCTGCTT TCCGCTCTTC CCTTTTTTGG AAA-3' (SEQ ID ~~NO:~~ NO: 67) with the bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAA GGGAA GAGCGGAAAG CAGATCTCTT GAATCTGCTT TCCGCTCTTC CC G-3' (SEQ ID ~~NO:~~ NO: 68).

[0124] Another RNAi design for Taura syndrome virus (TSV) *RdRp* gene (AF277675) that could be regulated by RNAi can be done several different ways. As designed by Ambion one siRNA design is based on a sense siRNA strand (5'→3') GGAAUUCAUU GUUGACAACT T (SEQ ID ~~NO:~~ NO: 69) and an antisense siRNA strand (5'→3') GUUGUCAACA AUGAAUUCCT C (SEQ ID ~~NO:~~ NO: 70). The template design for this to use pSilencer(TM) siRNA vectors has the top strand oligonucleotide template 5'-GATCC GGAAT TCATTGTTGA CAACTTCAAG AGAGTTGTCA ACAATGAATT CCTCTTTTTT GGAAA-3' (SEQ ID ~~NO:~~ NO: 71) with the bottom strand oligonucleotide template as 5'-AGCTTTTCCA AAAAGAGGA ATTCATTGTT GACAACTCTC TTGAAGTTGT CAACAATGAA TTCC G-3' (SEQ ID ~~NO:~~ NO: 72).

[0125] RNAi designs for Taura syndrome virus (TSV) *vp*1 gene (AF277675) that could be regulated by RNAi can be done several different ways. As designed by Ambion one siRNA design is based on a sense siRNA strand (5'→3') GGAUUGGAUG AGAUGUCUAT T (SEQ ID ~~NO:~~ NO: 73) and an antisense siRNA strand (5'→3') UAGACAUCUC AUCCAAUCCT T (SEQ ID ~~NO:~~ NO: 74). The template design for this to use pSilencer(TM) siRNA vectors has the top strand oligonucleotide template 5'-GATCC GGATT GGATGAGATG TCTATTCAAG AGATAGACAT CTCATCCAAT CCTTTTTTGG AAA-3' (SEQ ID ~~NO:~~ NO: 75) with the

bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAAGGATT GGATGAGATG TCTATCTCTT GAATAGACAT CTCATCCAAT CC G-3' (SEQ ID ~~NO:~~ NO: 76).

[0126] Another RNAi design for Taura syndrome virus (TSV) *vp*1 gene (AF277675) that could be regulated by RNAi can be done several different ways. As designed by Ambion one siRNA design is based on a sense siRNA strand (5'→3') GGUACGCUUG CUAAAGCAGT T (SEQ ID ~~NO:~~ NO: 77) and an antisense siRNA strand (5'→3') CUGCUUUAGC AAGCGUACCT G (SEQ ID ~~NO:~~ NO: 78). The template design for this to use pSilencer(TM) siRNA vectors has the top strand oligonucleotide template 5'-GATCC GGTAC GCTTGCTAAA GCAGTTCAAG AGACTGCTTT AGCAAGCGTA CCTGTTTTTT GGAAA-3' (SEQ ID ~~NO:~~ NO: 79) with the bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAA CAGGT ACGCTTGCTA AAGCAGTCTC TTGAACTGCT TTAGCAAGCG TACC G-3' (SEQ ID ~~NO:~~ NO: 80).

[0127] Another RNAi design for Taura syndrome virus (TSV) *vp*1 gene (AF277675) that could be regulated by RNAi can be done several different ways. As designed by Ambion one siRNA design is based on a sense siRNA strand (5'→3') GGAUACGAAG GUGUCUUUGT T (SEQ ID ~~NO:~~ NO: 81) and an antisense siRNA strand (5'→3') CAAAGACACC UUCGUAUCCT G (SEQ ID ~~NO:~~ NO: 82). The template design for this to use pSilencer(TM) siRNA vectors has the top strand oligonucleotide template 5'-GATCC GGATA CGAAGGTGTC TTTGTTCAAG AGACAAAGAC ACCTTCGTAT CCTGTTTTTT GGAAA-3' (SEQ ID ~~NO:~~ NO: 83) with the bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAA CAGGA TACGAAGGTG TCTTTG TCT CTTGAACAAA GACACCTTCG TATCC G-3' (SEQ ID ~~NO:~~ NO: 84).

Please delete paragraphs [0130] – [0132] which appear in the specification on pages 25 – 26 and substitute the following paragraphs [0130] – [0132] in place thereof:

[0130] RNAi designs for Yellow head virus (YHV) structural glycoprotein gene *YHVgp* (AF540644) that could be regulated by RNAi can be done several different ways. As designed by Ambion one siRNA design is based on a sense siRNA strand (5'→3') GGCUCGCAUA

UCAUUUAUAT T (SEQ ID ~~NO:~~ NO: 85) and an antisense siRNA strand (5'→3')

UAUAAAUGAU AUGCGAGCCT G (SEQ ID ~~NO:~~ NO: 86). The template design for this to

use pSilencer(TM) siRNA vectors has the top strand oligonucleotide template 5'-

GATCCGGCTC GCATATCATT TATATTCAAG AGATATAAAT GATATGCGAG

CCTGTTTTTT GGAAA-3' (SEQ ID ~~NO:~~ NO: 87) with the bottom strand oligonucleotide

template 5'-AGCTTTTCCA AAAAACAGGC TCGCATATCA TTTATATCTC

TTGAATATAA ATGATATGCG AGCC G-3' (SEQ ID ~~NO:~~ NO: 88).

[0131]   Another RNAi design for Yellow head virus (YHV) structural glycoprotein gene

YHVgp (AF540644) can be done several different ways. As designed by Ambion one siRNA

design is based on a sense siRNA strand (5'→3') GGAUAUCCUC CCGCCAACAT T (SEQ ID

~~NO:~~ NO: 89) and an antisense siRNA strand (5'→3') UGUUGGCGGG AGGAUAUCCT T

(SEQ ID ~~NO:~~ NO: 90). The template design for this to use pSilencer(TM) siRNA vectors has

the top strand oligonucleotide template 5'-GATCC GGATA TCCTCCCGCC AACATTCAAG

AGATGTTGGC GGGAGGATAT CCTTTTTTGG AAA-3' (SEQ ID ~~NO:~~ NO: 91) with the

bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAA GGATA TCCTCCCGCC

AACATCTCTT GAATGTTGGC GGGAGGATAT CC G-3' (SEQ ID ~~NO:~~ NO: 92).

Another RNAi design for Yellow head virus (YHV) structural glycoprotein gene *YHVgp*

(AF540644) can be done several different ways. As designed by Ambion one siRNA design is

based on a sense siRNA strand (5'→3') GGUCUUUGUU AUGAAGUAGT T (SEQ ID

~~NO:~~ NO: 93) and an antisense siRNA strand (5'→3') CUACUUCAUA ACAAAGACCT T

(SEQ ID ~~NO:~~ NO: 94). The template design for this to use pSilencer(TM) siRNA vectors is

the top strand oligonucleotide template 5'-GATCC GGTCT TTGTTATGAA GTAGTTCAAG

AGACTACTTC ATAACAAAGA CCTTTTTTGG AAA-3' (SEQ ID ~~NO:~~ NO: 95) with the

bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAGGTCT TTGTTATGAA

GTAGTCTCTT GAACTACTTC ATAACAAAGA CC G-3' (SEQ ID ~~NO:~~ NO: 96).

Please delete paragraphs [0135] – [0140] which appear in the specification on pages 26 –

28 and substitute the following paragraphs [0135] – [0140] in place thereof:

[0135] The siRNA design for Infectious hypodermal and hematopoietic necrosis virus (IHHNV) gene *orf*1 (AF273215) can be done several different ways. As designed by Ambion one siRNA Design is based on a sense siRNA strand (5'→3') GGACAUACUG CAUACACGUT T (SEQ ID ~~NO:~~ NO: 97) and an antisense siRNA strand (5'→3') ACGUGUAUGC AGUAUGUCCT T (SEQ ID ~~NO:~~ NO: 98). The template design for this to use pSilencer(TM) siRNA expression vectors (2.0, 2.1, 3.0, & 3.1 from Ambion) is the top Strand Oligonucleotide Template 5'-GATCCGGACA TACTGCATAC ACGTTTCAAG AGAACGTGTA TGCAGTATGT CCTTTTTTGG AAA-3' (SEQ ID ~~NO:~~ NO: 99) with the bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAA GGACA TACTGCATAC ACGTTCTCTT GAAACGTGTA TGCAGTATGT CC G-3' (SEQ ID ~~NO:~~ NO: 100).

[0136] A second siRNA design for IHHNV gene *orf*1 (AF273215) can be done several different ways. As designed by Ambion one siRNA Design is based on a sense siRNA strand (5'→3') GGUCCAAAUC AAGACCCUAT T (SEQ ID ~~NO:~~ NO: 101) and an antisense siRNA strand (5'→3') UAGGGUCUUG AUUUGGACCT G (SEQ ID ~~NO:~~ NO: 102). The template design for this to use pSilencer(TM) siRNA vectors is the top strand oligonucleotide template 5'-GATCC GGTCC AAATCAAGAC CCTATTCAAG AGATAGGGTC TTGATTTGGA CCTGTTTTT GGAAA-3' (SEQ ID ~~NO:~~ NO: 103) with the bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAACAGGT CCAAATCAAG ACCCTATCTC TTGAATAGGG TCTTGATTTG GACC G-3' (SEQ ID ~~NO:~~ NO: 104).

[0137] A third siRNA design for IHHNV gene *orf*1 (AF273215) can be done several different ways. As designed by Ambion one siRNA Design is based on a sense siRNA strand (5'→3') GGACAAUAUA AAGACAAACT T (SEQ ID ~~NO:~~ NO: 105) and an antisense siRNA strand (5'→3') GUUUGUCUUU AUAUUGUCCT C (SEQ ID ~~NO:~~ NO: 106). The template design for this to use pSilencer(TM) siRNA vectors is the top strand oligonucleotide template 5'-GATCCGGACA ATATAAAGAC AAACTTCAAG AGAGTTTGTC TTTATATTGT CCTCTTTTT GGAAA-3' (SEQ ID ~~NO:~~ NO: 107) with the bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAGAGGA CAATATAAAG ACAAACTCTC TTGAAGTTTG TCTTTATATT GTCC G-3' (SEQ ID ~~NO:~~ NO: 108).

[0138] Another gene that could be regulated by RNAi design for IHHNV gene *orf2* (AF273215) can be done several different ways. As designed by Ambion one siRNA Design is based on a sense siRNA strand (5'→3') GGAUCAAGUG GACCAGACCT T (SEQ ID NO: ̶ NO: 109) and an antisense siRNA strand (5'→3') GGUCUGGUCC ACUUGAUCCT T (SEQ ID NO: ̶ NO: 110). The template design for this to use pSilencer(TM) siRNA vectors is the top strand oligonucleotide template 5'-GATCCGGATC AAGTGGACCA GACCTTCAAG AGAGGTCTGG TCCACTTGAT CCTTTTTTGG AAA-3' (SEQ ID NO: ̶ NO: 111) with the bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAAGGATC AAGTGGACCA GACCTCTCTT GAAGGTCTGG TCCACTTGAT CC G-3' (SEQ ID NO: ̶ NO: 112).

[0139] Another RNAi design for IHHNV gene *orf2* (AF273215) can be done several different ways. As designed by Ambion one siRNA design is based on a sense siRNA strand (5'→3') GGAGGCACAU CAUUUGAGAT T (SEQ ID NO: ̶ NO: 113) and an antisense siRNA strand (5'→3') UCUCAAAUGA UGUGCCUCCT G (SEQ ID NO: ̶ NO: 114). The template design for this to use pSilencer(TM) siRNA vectors is the top strand oligonucleotide template 5'-GATCCGGAGG CACATCATTT GAGATTCAAG AGATCTCAAA TGATGTGCCT CCTGTTTTTT GGAAA-3' (SEQ ID NO: ̶ NO: 115) with the bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAACAGGA GGCACATCAT TTGAGATCTC TTGAATCTCA AATGATGTGC CTCC G-3' (SEQ ID NO: ̶ NO: 116). Another RNAi design for IHHNV gene *orf2* (AF273215) can be done several different ways. As designed by Ambion one siRNA design is based on a sense siRNA strand (5'→3') GGAUACUACUGGACUACAUTT (SEQ ID NO: ̶ NO: 117) and an antisense siRNA strand (5'→3') AUGUAGUCCA GUAGUAUCCT T (SEQ ID NO: ̶ NO: 118). The template design for this to use pSilencer(TM) siRNA vectors is the top strand oligonucleotide template 5'-GATCCGGATA CTACTGGACT ACATTCAAG AGAATGTAGT CCAGTAGTAT CCTTTTTTGG AAA-3' (SEQ ID NO: ̶ NO: 119) with the bottom strand oligonucleotide template 5'-AGCTTTTCCA AAAAGGATA CTACTGGACT ACATTCTCTT GAAATGTAGT CCAGTAGTAT CC G-3' (SEQ ID NO: ̶ NO: 120).